

ball bearing having inner and outer races and balls between the inner and outer races, and wherein one of the inner and outer races is an integral race installed on the side of the rotatable shaft with a radial clearance between the integral race and the shaft in the non-contact condition, the other of the inner and outer races being of a split type, and the integral race being supported only by the split-type races through the balls, whereby a large thrust load from the rotatable shaft is borne by the rolling bearing upon the rotation stoppage.

4. (Amended) A bearing unit comprising a magnetic bearing which supports a rotatable shaft in a non-contact condition during operation, and a rolling bearing which is provided on either side of the magnetic bearing and arranged to be separated from the rotatable shaft while the magnetic bearing supports the rotatable shaft and to come into contact with the rotatable shaft for supporting the rotatable shaft when the magnetic bearing does not support the rotatable shaft, and a supporting member for supporting the rolling bearing, wherein the rolling bearing provided on the side with respect to the magnetic bearing where the thrust load is received or on the side with respect to the magnetic bearing where positioning in the axial direction is carried out comprises a double row, angular ball bearing for supporting the rotatable shaft against a thrust load upon rotation stoppage, and wherein the double row, angular ball bearing has inner and outer races and balls between the inner and outer races, such that one of the inner and outer races is an integral race installed on the side of the rotatable shaft with a radial clearance between the integral race and the shaft in the non-contact condition, the other of the inner and outer races being of a split type, and the integral race being supported only by the split-type races through the balls against the thrust load from the rotatable shaft when the rolling bearing comes into contact with the rotatable shaft while the other of the inner and outer races is securely supported by the supporting member.